



## Company Profile

TRACO Electronic AG is a Swiss company with headquarters based in Baar, Switzerland. As a leading power supply specialist with more than 40 years experience we are dedicated to the design and manufacturing of high quality DC/DC and AC/DC power conversion products.

TRACO markets its products worldwide under the registered trademark TRACO POWER. Our mission is to provide our customers with optimal power supply solutions in terms of performance, quality and cost for their individual application.

## Product Range

TRACO POWER's product range focuses on the four **vertical markets**:

**Industrial, Medical & Healthcare, Railway / Ruggedized and Building Technology & Household.**

Within these markets TRACO offers one of the most comprehensive programs for standard products in application areas such as:

Test & Measurement, Automation & Control, Robotics, Machinery, Therapy, Diagnostic, Laboratory, Home & Office Automation, White Goods, Transportation, Construction & Farming, Information Technology, Smartgrid, Renewable Energy, Oil & Gas.

Detailed product data can be downloaded from our website: [www.tracopower.com](http://www.tracopower.com)

## Icons used throughout the catalog



### High isolation products for medical applications

- Product certification according to IEC/EN/ES 60601-1 3rd edition for 2 × MOPP
- EMC emission according to IEC 60601-1-2 ed. 4
- Risk management process according to ISO 14971 including risk management file
- Acceptance criteria for electronic assemblies according to IPC-A-610 Level 3
- Design and production according to ISO 13485 quality management system
- 5-year product warranty



### Ruggedized DC/DC converters for railway applications

- Approved to EN 50155 for electronic equipment used on rolling stock
- Shock and vibration test according to EN 61373
- Qualification for the fire behavior of components according to EN 45545-2

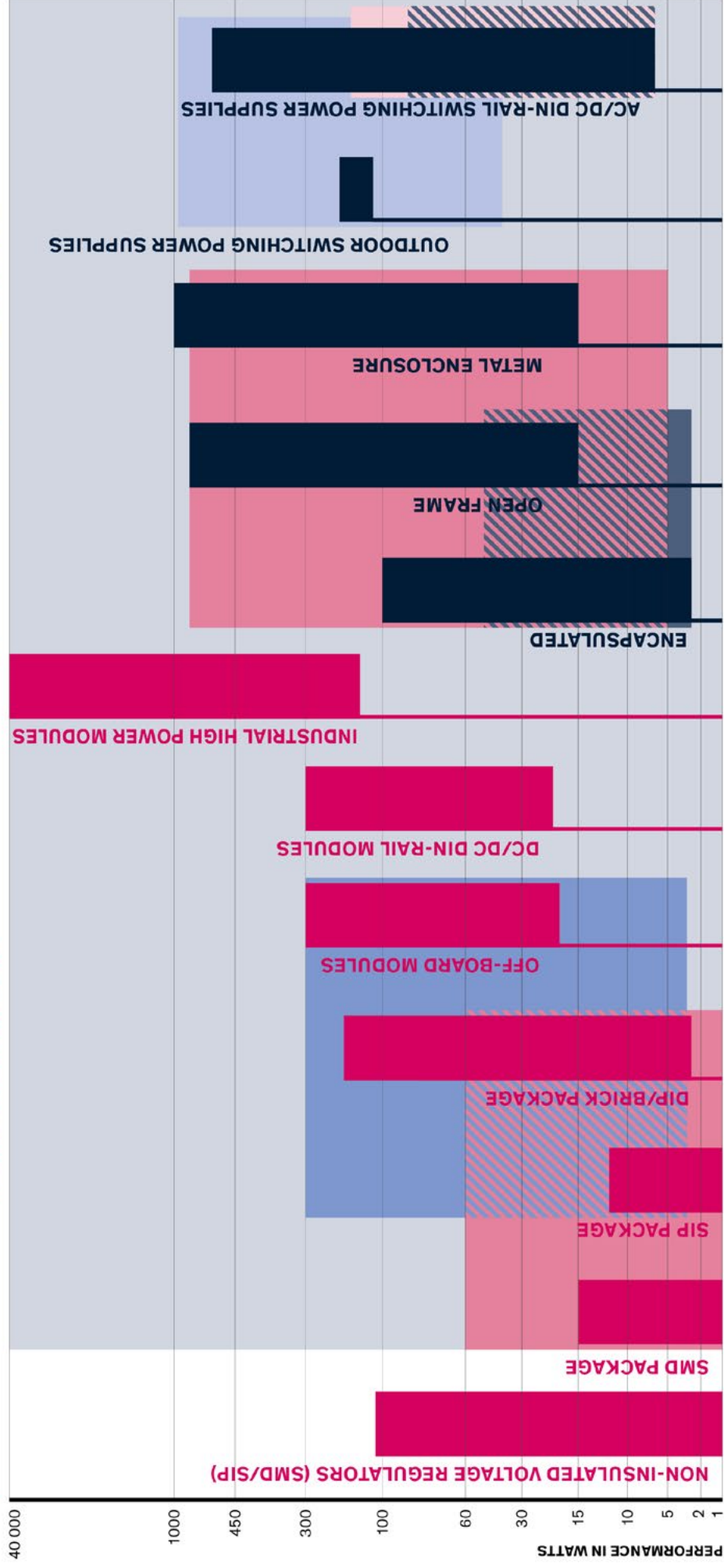


### Building Technology / Household

- Product certification according to IEC/EN 60335-1

## DC/DC CONVERTER

## AC/DC & DIN RAIL



## SPECIAL APPROVALS/TARGET MARKETS

MEDICAL TECHNOLOGY

INDUSTRY/ICT

RAILWAY AND TRANSPORT

HOUSEHOLD

HARSH ENVIRONMENT ATEX

BUILDING TECHNOLOGY

## DC/DC Converters

Non-Isolated Step Down DC/DC Converters (POL) in SIP Package	0.5 – 30 Amp	5
Non-Isolated Step Down DC/DC Converters (POL) SMD Package	0.5 – 30 Amp	5 – 6
SMD DC/DC Converters	1 – 15 Watt	6 – 7
SIP DC/DC Converters	1 – 12 Watt	7 – 9
High Performance DC/DC Converters	1 – 80 Watt	9 – 13
High Power DC/DC Converters / RIA12 Surge Filters	40 – 300 Watt	13 – 14
Industrial DIN-Rail Mount DC/DC Converters	20 – 300 Watt	14
Industrial High Power Converters	150 Watt – 40kW / 45 kVA	15

## AC/DC Power Supplies

Encapsulated AC/DC Power Modules	3 – 100 Watt	15 – 17
Metal Enclosure and Open Frame Power Supplies	15 – 1000 Watt	17 – 19
Outdoor Power Supply	120 Watt	19

## DIN-Rail Mount System Solutions

DIN-Rail Power Supplies	6 – 600 Watt	20
UPS Systems and Function Modules (DIN-Rail and Industrial Cabinets)	72 – 600 Watt	20 – 21



## Non-Isolated Step Down DC/DC Converters (POL) in SIP Package

0.5 – 30 Amp

- Alternative to linear voltage regulators
- High efficiency up to 97%

- No heat-sink required
- Over-temperature protection

- Excellent line / load regulation
- Operating temperature –40 to +85°C

## 0.5 AMP

TSR 0.5

- +Vin/+Vout
- Input 4.75–32 VDC
- 1.5 to 15 Vout fixed
- LM78xx compatible
- 11.5 × 7.6 × 10.2 mm



## 0.6 AMP

TSR 0.6WI

- +Vin/+Vout
- Input 9.0–72 VDC
- 3.3 to 24 Vout fixed
- LM78xx compatible
- 12 × 8.6 × 13.4 mm



## 1 AMP

TSR 1

- +Vin/+Vout
- Input 1.2–36 VDC
- 1.5 to 15 Vout fixed
- LM78 compatible
- 11.7 × 7.6 × 10 mm



## 1 AMP

TSR 1E

- +Vin/+Vout
- Input 6–36 VDC
- 3.3 and 5.0 Vout fixed
- Cost optimized design
- LM78xx compatible
- 11.5 × 7.6 × 10.2 mm



## 1.0 AMP

TSR 1WI

- +Vin/+Vout
- Input 9.0–72 VDC
- 3.3 to 24 Vout fixed
- LM78xx compatible
- 12.1 × 8.6 × 17.5 mm



## 1 AMP

TSN 1

- –Vin/–Vout
- Input –7.0–32 VDC
- –5.0 to –15 Vout fixed
- LM79 compatible
- 11.7 × 7.5 × 16.5 mm



## 1 AMP

TSRN 1

- +Vin/+Vout or –Vout
- Input 4.6–36 VDC
- (±)1.5 to 15 Vout fixed
- 11.7 × 7.5 × 10.2 mm



## 1.5 AMP

TSR 1.5E

- +Vin /+Vout
- Input 7–36 VDC
- 3.3, 5.0, 12 Vout fixed
- Cost optimized design
- LM78xx compatible
- 9.6 × 6.4 × 14.9 mm



## 2 AMP

TSR 2

- +Vin/+Vout
- Input 3.0–36 VDC
- 1.2 to 15 Vout fixed
- LM78 compatible
- 14 × 7.5 × 10.1 mm



## 3 AMP

TSR 3

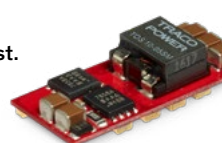
- +Vin/+Vout or –Vout
- Input 2.5–30 VDC
- (±) 0.6 to 15 Vout adjust.
- Remote On/Off
- Open frame
- 16.5 × 10.4 × 6 mm



## 6–30 AMP

TOS

- +Vin/+Vout
- Input 2.4–14 VDC
- 0.75 to 5.5 Vout adjust.
- Remote On/Off
- Open frame



## Non-Isolated Step Down DC/DC Converters (POL) SMD Package

0.5 – 30 Amp

- Alternative to linear voltage regulators
- High efficiency up to 97%

- No heat-sink required
- Over-temperature protection

- Excellent line / load regulation
- Operating temperature –40 to +85°C

## 0.5 AMP

TSR 0.5SM

- +Vin/+Vout
- Input 4.75–32 VDC
- 1.4 to 15.5 Vout adjust.
- Remote On/Off
- 15.3 × 9.6 × 9.2 mm



## 1 AMP

TSR 1SM

- +Vin/+Vout
- Input 3.0–36 VDC
- 1.2 to 15 Vout fixed
- 15.2 × 9.3 × 7.6 mm



## 1 AMP

TSRN 1SM

- +Vin/+Vout or –Vout
- Input 3.0–42 VDC
- (±)1.2 to 15.5 VDC adjust.
- Remote On/Off
- 15.2 × 9.3 × 7.3 mm



## 6–30 AMP

## TOS

- +Vin/+Vout
- Input 2.4–14 VDC
- 0.75 to 5.5 VDC adjust.
- Remote On/Off
- Open frame



## SMD DC/DC Converters

## 1 – 15 Watt

- MSL Level 2a or better
- Operating temperature –40 to +85°C

- 1500 VDC I/O-isolation (standard)
- Single and dual output models

- Washable models on request
- Available in tape & reel package

## 1 WATT

## TES 1N

NEW under development

- Cost efficient design
- $\pm 10\%$  Input 5, 12, 24 VDC
- 3.3 to 15 VDC (unregulated)
- 13.6 × 8.8 × 7.85 mm (single)
- 15.2 × 8.4 × 7.85 mm (dual)



## 1 WATT

## TES 1

- $\pm 10\%$  Input 5, 12, 24 VDC
- 3.3 to 15 VDC (unregulated)
- 13.7 × 8.0 × 7.0 mm (single)
- 16.2 × 8.0 × 7.0 mm (dual)



## 1 WATT

## TES 1V

- 3000 VDC I/O-isolation
- $\pm 10\%$  Input 5, 12, 24 VDC
- 3.3 to 15 VDC (unregulated)
- 16.3 × 8.0 × 8.0 mm



## 1 WATT

## TRN 1SM

- 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- 11.9 × 11.3 × 8.0 mm



## 1 WATT

## TDN 1WISM

- 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- Remote On/Off
- 13.2 × 9.1 × 10.2 mm



## 1 WATT

## TMR 1SM

- 2:1 Input 4.5 to 75 VDC
- 5.0 to 24 VDC
- Remote On/Off
- 18.9 × 13.7 × 8.7 mm



## 1 WATT

TRI 1SM  
NEW

- Unregulated
- 3000 VAC I/O-isolation rated for 480 VACrms working voltage (reinforced)
- 8000 VDC peak isolation (1s)
- $\pm 10\%$  Input 5 to 24 VDC
- 5.0 to 15 VDC
- 18.9 × 13.7 × 10.5 mm



## 2 WATT

## TES 2H

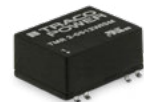
- $\pm 10\%$  Input 5, 12, 24 VDC
- 3.3 to 15 VDC (unregulated)
- 16.3 × 9.3 × 8.9 mm



## 2 WATT

## TMR 2WISM

- 4:1 Input 4.5 to 75 VDC
- 5.0 to 24 VDC
- Remote On/Off
- IEC/UL 62368-1
- 19.0 × 14.9 × 8.7 mm



## 2 WATT

## TDR 2(WI)SM

- Epoxy over mold (washable)
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 15 VDC
- Remote On/Off
- IEC/UL 62368-1
- 18.9 × 12.8 × 8.7 mm



## 2 WATT

## TRS 2

- 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- 11.9 × 11.3 × 8.0 mm



## 2 WATT

## TES 2M

- 4 kVAC I/O-isolation
- $\pm 10\%$  Input 5, 12, 24 VDC
- 5.0 to 15 VDC (unreg.)
- IEC 60601-1 (2 × MOOP)
- 24.0 × 13.7 × 9.3 mm



## 2 WATT

## ⊕ TIM 2SM

- Medical safety approval
- 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- IEC/UL 62368-1, IEC/ES 60601-1
- SMD-16 (24.3 × 14.4)



## 3 WATT

## TRN 3SM

- 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- 11.9 × 11.3 × 8.0 mm



## 3 WATT

## TDN 3WISM

- 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- Remote On/Off
- Compact design
- 13.2 × 9.1 × 10.2 mm



**3 WATT****TMR 3WISM**

- 4:1 Input 4.5 to 75 VDC
- 5.0 to 24 VDC
- Remote On/Off
- IEC/UL 62368-1
- 19.0 × 14.9 × 8.7 mm

**3 WATT****TDR 3(WI)SM**

- Epoxy over mold (washable)
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 5.0 to 15 VDC
- Remote On/Off
- IEC/UL 62368-1
- 18.9 × 12.8 × 8.7 mm

**3.5 WATT****⊕ TIM 3.5SM**

- Medical safety approval (2 × MOPP)
- 2:1/3:1 Input 4.5 to 75 VDC
- 5.0 to 24 VDC
- IEC/UL 62368-1, IEC/ES 60601-1
- SMD-16 (24.3 × 14.4)

**5 WATT****TDN 5WISM**

- 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- Remote On/Off
- Compact design
- 13.2 × 9.1 × 10.2 mm

**15 WATT****TON 15(WI)SM**

- EN 55032 class A filter
- 2:1 or 4:1 Input. 9 to 75 VDC
- 3.3 to 15 VDC adjust.
- Remote On/Off
- IEC/UL 62368-1
- 27.9 × 23.9 × 8.5 mm

**SIP DC/DC Converters****1 – 12 Watt**

- Single and dual output models (standard)
- Operating temperature –40 to +85°C

- IT approval acc. to IEC/EN/UL 62368-1 (for regulated & high isolation converters)

- 1500 VDC I/O-isolation (standard)

**1 WATT****TBA 1E**

- Unregulated
- Short circuit protection
- ±10% Input 5 to 24 VDC
- 5.0 to 15 VDC
- 19.5 × 6 × 10 mm

**1 WATT****TEA 1E**

- Unregulated
- Cost optimized design
- ±10% Input 5 VDC
- 5 VDC output (single)
- 19.5 × 6 × 10 mm

**1 WATT****TMA**

- Unregulated
- ±10% Input 5 to 24 VDC
- 5.0 to 15 VDC
- 19.5 × 6.1 × 10.2 mm

**1 WATT****TBA 1**

- Unregulated
- Short circuit protection
- Compact design
- ±10% Input 3.3 to 24 VDC
- 3.3 to 15 VDC (single only)
- 11.7 × 6 × 10 mm

**1 WATT****TEA 1**

- Unregulated
- Compact and cost optimized design
- ±10% Input 5 VDC
- 5 VDC output (single)
- 11.7 × 6 × 10.2 mm

**1 WATT****TME**

- Unregulated
- Compact design
- ±10% Input 3.3 to 24 VDC
- 3.3 to 15 VDC (single only)
- 11.5 × 6.1 × 10.2 mm

**1 WATT****TMV**

- Unregulated
- 3000 VDC I/O-isolation
- ±10 % Input 5 to 24 VDC
- 5.0 to 15 VDC
- 19.5 × 6.1 × 10.2 mm

**1 WATT****TBA 1HI**

- Unregulated
- Short circuit protection
- 3000 VDC I/O-isolation
- ±10% Input 5 to 24 VDC
- 5.0 to 15 VDC
- 19.5 × 6 × 10 mm

**1 WATT****TEA 1HI**

- Unregulated
- 4000 VDC I/O-isolation
- Cost optimized design
- ±10% Input 5 VDC
- 5 VDC output (single)
- 19.5 × 6 × 10 mm

**1 WATT****TMV-HI**

- Unregulated
- 5200 VDC I/O-isolation
- ±10% Input 5 to 24 VDC
- 3.3 to 15 VDC
- 19.5 × 7.5 × 10.2 mm

**1 WATT****TMV-EN**

- Unregulated
- 3000 VDC reinforced I/O-isolation
- ±10 % Input 5 to 12 VDC
- 5.0 to 15 VDC
- 22.0 × 7.5 × 12.5 mm

**1 WATT****TRI 1  
NEW**

- Unregulated
- 3000 VAC I/O-isolation rated for 480 VACrms working voltage (reinforced)
- 8000 VDC peak isolation (1s)
- ±10 % Input 5 to 24 VDC
- 5.0 to 15 VDC
- 21 × 12.5 × 7.5 mm



## 1 WATT

- Semi regulation (load)
- 3000 VDC I/O-isolation
- $\pm 10\%$  Input 5 to 24 VDC
- 5.0 to 15 VDC
- $19.5 \times 6.1 \times 10.2$  mm



## TRV 1

## 1 WATT

- Semi regulation
- Medical safety approval (2 x MOPP)
- 5000 VAC I/O-isolation (reinforced)
- $\pm 10\%$  Input 5 to 24 VDC
- 3.3 to 15 VDC
- $19.6 \times 9.8 \times 12.5$  mm



## ⊕ TRV 1M

## 1 WATT

- Regulated
- 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- $11.9 \times 7.7 \times 11.0$  mm



## TRN 1

## 1 WATT

- Regulated
- 2:1 Input 4.5 to 75 VDC
- 5.0 to 24 VDC
- $17.0 \times 7.6 \times 11.0$  mm



## TMR 1

## 2 WATT

- Unregulated
- Short circuit protection
- 1500 VDC I/O-isolation
- $\pm 10\%$  Input 5 to 24 VDC
- 5 to 24 VDC output
- $11.3 \times 7.6 \times 10.4$  mm



## TMU 2

NEW under development

## 2 WATT

- Unregulated
- 5200 VDC I/O-isolation
- $\pm 10\%$  Input 5 to 24 VDC
- 3.3 to 15 VDC
- $19.5 \times 7.1 \times 10.2$  mm



## TMV 2HI

## 2 WATT

- Unregulated
- Short circuit protection
- 1500 VDC I/O-isolation
- $\pm 10\%$  Input 5 to 24 VDC
- 5.0 to 15 VDC
- $19.5 \times 7.6 \times 10.2$  mm



## TBA 2

## 2 WATT

- Unregulated
- $\pm 10\%$  Input 5 to 24 VDC
- 5.0 to 15 VDC
- $19.5 \times 7.5 \times 10.2$  mm



## TMH

## 2 WATT

- Regulated
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- Remote On/Off
- $21.8 \times 9.1 \times 11.2$  mm



## TEC 2(WI)

## 2 WATT

- Regulated
- 2:1 Input 4.5 to 75 VDC
- 3.3 to 12 VDC
- Remote On/Off
- $21.8 \times 9.2 \times 11.1$  mm



## TMR 2

## 2 WATT

- Regulated
- 4:1 Input 4.5 to 75 VDC
- 3.3 to 15 VDC
- Remote On/Off
- $21.8 \times 9.3 \times 11.2$  mm



## TMR 2WIN

## 2 WATT

- Semi regulation
- Medical safety approval (2 x MOPP)
- 5000 VAC I/O-isolation (reinforced)
- $\pm 10\%$  Input 5 to 24 VDC
- 3.3 to 15 VDC
- $19.6 \times 9.8 \times 12.5$  mm

⊕ TRV 2M  
NEW

## 3 WATT

- Unregulated
- Short circuit protection
- 1500 VDC I/O-isolation
- $\pm 10\%$  Input 5 to 24 VDC
- 5.0 to 15 VDC
- $11.5 \times 8.6 \times 10.2$  mm

TMU 3  
NEW

## 3 WATT

- Regulated
- 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- $11.9 \times 7.7 \times 11.0$  mm



## TRN 3

## 3 WATT

- Regulated
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- Remote On/Off
- $21.8 \times 9.1 \times 11.2$  mm



## TEC 3(WI)

## 3 WATT

- Regulated
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 15 VDC
- Remote On/Off
- $21.8 \times 9.2 \times 11.2$  mm



## TMR 3(WI)

## 3 WATT

- Regulated
- 3000 VDC I/O-isolation
- 2:1 Input 4.5 to 75 VDC
- 3.3 to 15 VDC
- Remote On/Off
- $21.8 \times 9.2 \times 11.2$  mm



## TMR 3HI

## 3 WATT

- Ultra low ripple & noise
- 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- Remote On/Off
- $21.8 \times 9.6 \times 11.2$  mm



## TVN 3

## 3 WATT

- Railway approval
- Regulated
- 3000 VDC I/O-isolation
- 4:1 Input 9 to 160 VDC
- 3.3 to 24 VDC
- $21.8 \times 9.6 \times 11.2$  mm



## TMR 3WIR

## 4 WATT

- Regulated
- 2:1 or 4:1 Input 9 to 75 VDC
- 5 to 24 VDC
- Remote On/Off
- $21.8 \times 9.3 \times 11.2$  mm



## TMR 4(WI)

## 6 WATT

- Regulated
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- Remote On/Off
- $21.8 \times 9.1 \times 11.2$  mm



## TMR 6(WI)



**6 WATT** **TMR 6WIR**

- Railway approval
- Regulated
- 3000 VDC I/O-isolation
- 4:1 Input 9 to 160 VDC
- 3.3 to 24 VDC
- 21.8 × 9.6 × 11.2 mm

**9 WATT****TMR 9(WI)**

- Regulated
- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- Remote On/Off
- 21.8 × 9.1 × 11.2 mm

**12 WATT****TMR 12WI**  
**NEW**

- Regulated
- 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- Remote On/Off
- 22 × 9.6 × 12 mm

**High Performance DC/DC Converters****1 – 80 Watt**

- Fully regulated outputs
- Single, dual (and triple) output models

- 1500 VDC I/O-isolation (standard)
- IT approval acc. to IEC/EN/UL 62368-1

- Operating temperature –40 to +85°C
- Opt. heat-sink for most >10 Watt models
- Remote On/Off control

**1 WATT****TDU 1**  
**NEW**

- Unregulated
- Short circuit protection
- 1500 VDC I/O-isolation
- ±10% Input 5 to 24 VDC
- 5 to 15 VDC output
- 12.7 × 10.2 × 8.0 mm

**1 WATT****TDN 1WI**

- 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- 13.2 × 9.1 × 10.2 mm

**2 WATT****TDL 2**

- Compact design
- 2:1 Input 4.5 to 75 VDC
- 3.3 to 15 VDC
- 14.0 × 14.0 × 8.0 mm

**2 WATT****TDR 2(WI)**

- Epoxy over-mold
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 5.0 to 15 VDC
- 18.9 × 12.8 × 8.7 mm

**2 WATT****TEL 2**

- 2:1 Input 4.5 to 75 VDC
- 3.3 to 15 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.7)

**2 WATT****THI 2M**

- Unregulated
- 2 × MOOP
- ±10 % Input 5 to 24 VDC
- 5.0 to 15 VDC
- DIP-16 (23.8 × 13.7)

**2 WATT** **TIM 2**

- Medical safety approval
- 2:1/3:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- DIP-16 (24.3 × 14.4)

**3 WATT****TDL 3**

- Compact design
- 2:1 Input 4.5 to 75 VDC
- 3.3 to 15 VDC
- 14.0 × 14.0 × 8.0 mm

**3 WATT****TDN 3WI**

- Ultra compact design
- 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- 13.2 × 9.1 × 10.2 mm

**3 WATT****TDR 3(WI)**

- Epoxy over-mold
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 5.0 to 15 VDC
- 18.9 × 12.8 × 8.7 mm

**3 WATT****THL 3WI**

- 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.7)

**3 WATT****TEM 3N**

- Cost down redesign
- ±10% Input 5 to 24 VDC
- 5.0 to 15 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)

**3 WATT****TEN 3(WI)N**

- Cost down redesign
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)

**3 WATT** **TEN 3WIRH**

- Railway approval
- 4:1 Input 36 to 160 VDC
- 3.3 to 24 VDC
- Reinforced Isolation
- DIP-24 (32 × 20.3)

**3.5 WATT****TRI 3**

- 5000 VAC I/O-isolation rated for 1000 Vrms working voltage
- 2:1 Input 4.5 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



**3 WATT****THR 3WI**

- 3000 VAC I/O-isolation (reinforced)
- 4:1 Input 9 to 160 VDC
- 5 to 15 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)

**3 WATT****THI 3**

- Regulated
- ±10% Input 5 to 24 VDC
- 5.0 to 15 VDC
- 2 × MOOP
- EN 55032 class A filter
- DIP-24 (32 × 20.3)

**3 WATT****THP 3**

- Regulated
- 4:1 Input 9 to 160 VDC
- 5.0 to 12 VDC
- 2 × MOOP
- EN 55032 class A filter
- DIP-24 (32 × 20.3)

**3 WATT****⊕ THM 3(WI)**

- Medical safety approval
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)

**3.5 WATT****⊕ TIM 3.5**

- Medical safety approval
- 2:1/3:1 Input 4.5 to 75 VDC
- 5.0 to 24 VDC
- DIP-16 (24.3 × 14.4)

**5 WATT****TDN 5WI**

- Highest power density
- 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- 13.2 × 9.1 × 10.2 mm

**5 WATT****TVN 5WI**

- Ultra low ripple & noise
- 4:1 Input 4.5 to 75 VDC
- 3.3 to 48 VDC
- EN 55032 class B filter
- Case pin
- DIP-24 (32 × 20.3)

**5 WATT****TEL 5**

- Cost optimized
- 2:1 Input 9 to 36 VDC
- 3.3 to 15 VDC
- DIP-24 (32 × 20.3)

**6 WATT****TMDC 06**

- 4:1 Input 9 to 75 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- Chassis/DIN-rail
- Screw terminal connection
- 53 × 34 × 26.5 mm

**6 WATT****TMDC 06H**

- 2:1 Input 80 to 160 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- Chassis/DIN-rail
- Screw terminal connection
- 53 × 34 × 26.5 mm

**6 WATT****TEL 6  
NEW**

- Cost efficient design
- 2:1 Input 9 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-16 (24.3 × 14.4)

**6 WATT****TEL 6WI  
NEW**

- Cost efficient design
- 4:1 Input 9 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-16 (24.3 × 14.4)

**6 WATT****TEN 6(WI)N**

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)

**6 WATT****TEN 6WIN-HI**

- 3000 VDC I/O-isolation
- 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)

**6 WATT****🚂 TEN 6WIRH**

- Railway approval
- 4:1 Input 36 to 160 VDC
- 3.3 to 24 VDC
- Reinforced Isolation
- DIP-24 (32 × 20.3)

**6 WATT****TRI 6**

- 5000 VAC I/O-isolation rated for 1000 Vrms working voltage
- 2:1 Input 9.0 to 75 VDC
- 5.0 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)

**6 WATT****⊕ THM 6(WI)**

- Medical safety approval
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)

**6 WATT****⊕ TIM 6  
NEW**

- Medical safety approval
- 2:1 Input 9 to 75 VDC
- 3.3 to 15 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)

**8 WATT****TEL 8(WI)**

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-16 (24.1 × 14)

**8 WATT****TEN 8**

- 2:1 Input 9 to 75 VDC
- 3.3 to 15 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)

**8 WATT****🚂 TEN 8WI**

- Railway approval
- 4:1 Input 9 to 160 VDC
- 3.3 to 15 VDC
- Increased EMC immunity
- DIP-24 (32 × 20.3)



## 10 WATT

## TEL 10

- Highest power density of 3.83 W/cm<sup>3</sup>
- 2:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.3)



## 10 WATT

## TEL 10WI

- Highest power density of 3.83 W/cm<sup>3</sup>
- 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.3)



## 10 WATT

## THD 10(WI)N

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



## 10 WATT

## THN 10WIR

- Railway approval
- EN 55032 class A filter
- 4:1 Input 9 to 160 VDC
- 3.3 to 24 VDC adjust.
- Increased EMC immunity
- 1" × 1"



## 10 WATT

## TEN 10WIRH

- Railway approval
- 4:1 Input 36 to 160 VDC
- 3.3 to 24 VDC
- Reinforced Isolation
- DIP-24 (32 × 20.3)



## 10 WATT

## TRI 10

- 5000 VAC I/O-isolation rated for 1000 Vrms working voltage
- 2:1 Input 9 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



## 10 WATT

## THR 10WI

- 3000 VAC I/O-isolation (reinforced)
- 4:1 Input 9 to 160 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- 2" × 1"



## 10 WATT

## THM 10(WI)

- Medical safety approval
- 2:1 or 4:1 Input 4.5 to 75 VDC
- 3.3 to 24 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



## 10 WATT

## TMDC 10

- Chassis/DIN-rail
- Screw terminal connection
- 4:1 Input 9 to 75 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 79 × 34 × 22 mm



## 10 WATT

## TMDC 10H

- Chassis/DIN-rail
- Screw terminal connection
- 2:1 Input 80 to 160 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 79 × 34 × 22 mm



## 12 WATT

## TEL 12

- Highest power density of 3.61 W/cm<sup>3</sup>
- 2:1 Input 9 to 75 VDC
- 5.1 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.3)



## 12 WATT

## TEL 12WI

- Highest power density of 3.61 W/cm<sup>3</sup>
- 4:1 Input 9 to 75 VDC
- 5.1 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.3)



## 12 WATT

## THD 12(WI)

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 15 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



## 15 WATT

## THD 15(WI)N

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 15 VDC
- EN 55032 class A filter
- DIP-24 (32 × 20.3)



## 15 WATT

## THN 15N

- 2:1 Input 9 to 75 VDC
- 3.3 to 48 VDC adjust.
- EN 55032 class A filter
- 1" × 1"
- Low no-load power consumption



## 15 WATT

## THL 15WI

- cost efficient design
- 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC adjust.
- EN 55032 class A filter
- 1" × 1"



## 15 WATT

## THN 15WI

- 4:1 Input 9 to 75 VDC
- 3.3 to 48 VDC adjust.
- 1" × 1"
- Remote On/Off



## 15 WATT

TEL 15N  
NEW

- Highest power density 4.51 W/cm<sup>3</sup>
- 2:1 Input 9 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.7)



## 15 WATT

TEL 15N-HS  
NEW

- High temperature range, up to 70°C without derating
- 2:1 Input 9 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-16 (24.4 × 14.3 × 24.4)



## 15 WATT

TEL 15WIN  
NEW

- Highest power density of 4.51 W/cm<sup>3</sup>
- 4:1 Input 9 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-16 (23.8 × 13.7)



## 15 WATT

TEL 15WIN-HS  
NEW

- High temperature range, up to 70°C without derating
- 4:1 Input 9 to 75 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- DIP-16 (24.4 × 14.3 × 24.4)

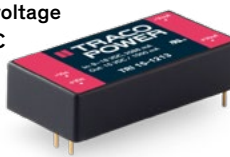




## 15 WATT

## TRI 15

- 4200 VAC I/O-isolation rated for 1000 Vrms working voltage
- 2:1 Input 9 to 75 VDC
- 5.1 to 24 VDC
- EN 55032 class A filter
- 2" x 1"



## 15 WATT

## THN 15WIR

- Railway approval
- EN 55032 class A filter
- 4:1 Input 9 to 160 VDC
- 3.3 to 48 VDC adjust.
- Increased EMC immunity
- 1" x 1"



## 15 WATT

## ⊕ THM 15(WI)

- Medical safety approval
- 2:1 or 4:1 Input 9 to 75 VDC
- 5.0 to 24 VDC
- EN 55032 class A filter
- 1.6" x 1"



## 20 WATT

## THN 20(WI)

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 48 VDC adjust.
- EN 55032 class A filter
- 1" x 1"



## 20 WATT

## TEN 20WIN

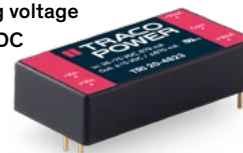
- 4:1 Input 9 to 75 VDC
- 3.3 to 15 VDC adjust.
- Remote On/Off
- 2" x 1"



## 20 WATT

## TRI 20

- 4200 VAC I/O-isolation rated for 1000 Vrms working voltage
- 2:1 Input 9 to 75 VDC
- 5.1 to 24 VDC
- EN 55032 class A filter
- 2" x 1"



## 20 WATT

## THR 20WI

- 3000 VAC I/O-isolation (reinforced)
- 4:1 Input 9 to 160 VDC
- 5 to 24 VDC
- EN 55032 class A filter
- 2" x 1"



## 20 WATT

## THN 20WIR

- Railway approval
- 4:1 Input 9 to 160 VDC
- 3.3 to 24 VDC adjust.
- Increased EMC immunity
- 1" x 1"



## 20 WATT

## TEN 20WIR

- Railway approval
- EN 55032 class A filter
- 4:1 Input 9 to 160 VDC
- 3.3 to 15 VDC adjust.
- Increased EMC immunity
- 2" x 1"



## 20 WATT

## TEN 20WIRH

- Railway approval
- 4:1 Input 36 to 160 VDC
- 5.1 to 24 VDC
- Reinforced Isolation
- 1.6" x 1"



## 20 WATT

## ⊕ THM 20(WI)

- Medical safety approval
- 2:1 or 4:1 Input 9 to 75 VDC
- 5.0 to 24 VDC
- EN 55032 class A filter
- 1.6" x 1"



## 20 WATT

## TMDC 20

- Chassis/DIN-rail
- Screw terminal connection
- 4:1 Input 9 to 75 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 3.8" x 2.1" x 0.9"



## 20 WATT

## TMDC 20H

- Chassis/DIN-rail
- Screw terminal connection
- 2:1 Input 80 to 160 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 3.8" x 2.1" x 0.9"



## 20 WATT

## TEQ 20WIR

- Railway approval
- EN 55032 class B filter
- 4:1 Input 9 to 160 VDC
- 5.0 to 24 VDC adjust.
- Increased EMC immunity
- Temp. range -40 to 93°C
- 4.1" x 2.3" x 1"



## 25 WATT

## THL 25(WI)

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 15 VDC adjust.
- Remote On/Off
- 1" x 1"



## 30 WATT

## TEN 30

- 2:1 Input 9 to 75 VDC
- 3.3 to 15 VDC adjust.
- Remote On/Off
- 2" x 1"



## 30 WATT

## TEN 30WIN

- With triple output models
- 4:1 Input 9 to 75 VDC
- 3.3 to 15 VDC adjust.
- 2" x 1"



## 30 WATT

## THN 30(WI)

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC adjust.
- Remote On/Off
- 1" x 1"



## 30 WATT

THL 30WI  
NEW

- High power density
- 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC adjust.
- EN 55032 class A filter
- 1" x 1"



## 30 WATT

## THN 30WIR

- Railway approval
- 4:1 Input 9 to 160 VDC
- 3.3 to 24 VDC adjust.
- Increased EMC immunity
- 1" x 1"



## 30 WATT

## ⊕ THM 30(WI)

- Medical safety approval
- 2:1 or 4:1 Input 9 to 75 VDC
- 5.0 to 24 VDC
- EN 55032 class A filter
- 2" x 1"





## 40 WATT

## THL 40WI

NEW under development

- 4:1 Input 9 to 75 VDC
- 5 to 24 VDC adjust.
- Highest power density
- Remote On/Off and Trim
- 1" x 1"



## 40 WATT

## TEN 40(WI)E

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC adjust.
- Maximized quality in a cost efficient design
- Remote On/Off
- 2" x 1"



## 40 WATT

## THR 40WI

- 3000 VAC I/O-isolation (reinforced)
- 4:1 Input 36 to 160 VDC
- 5 to 24 VDC
- 2" x 1"



## 40 WATT

## TEN 40WIR

- Railway approval
- 4:1 Input 9 to 160 VDC
- 3.3 to 48 VDC adjust.
- Increased EMC immunity
- 2" x 1"



## 40 WATT

## TEN 40WIRH

- Railway approval
- 4:1 Input 36 to 160 VDC
- 5.1 to 24 VDC
- Reinforced Isolation
- 2" x 1"



## 40 WATT

## TEQ 40WIR

- Railway approval
- EN 55032 class B filter
- 4:1 Input 9.5 to 160 VDC
- 5.0 to 24 VDC adjust.
- Increased EMC immunity
- 4.1" x 2.3" x 1"



## 40 WATT

## TMDC 40

- Chassis/DIN-rail
- Screw terminal connection
- 4:1 Input 9 to 75 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 4.4" x 2.5" x 1"



## 40 WATT

## TMDC 40H

- Chassis/DIN-rail
- Screw terminal connection
- 2:1 Input 80 to 160 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 4.4" x 2.5" x 1"



## 50 WATT

## TEN 50(WI)

- 2:1 or 4:1 Input 9 to 75 VDC
- 3.3 to 24 VDC adjust.
- Over temperature protection
- Remote On/Off
- 2" x 1"



## 60 WATT

## TEN 60(WI)N

- 2:1 or 4:1 Input 9 to 75 VDC
- 5.0 to 48 VDC adjust.
- EN 55032 class A filter
- 2" x 1"



## 60 WATT

## TEN 60WIR

- Railway approval
- 4:1 Input 9 to 160 VDC
- 5 to 48 VDC adjust.
- Increased EMC immunity
- 2" x 1"



## 60 WATT

THM 60WI  
NEW

- Medical safety approval
- 2 x MOPP
- 4:1 Input 9 to 75 VDC
- 5.0 to 24 VDC adjust.
- 2.3" x 1.45" x 0.5"



## 60 WATT

## TMDC 60

- Chassis/DIN-rail
- Screw terminal connection
- 4:1 Input 9 to 75 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 4.4" x 2.7" x 1.5"



## 60 WATT

## TMDC 60H

- Chassis/DIN-rail
- Screw terminal connection
- 2:1 Input 80 to 160 VDC
- 5.1 to 48 VDC
- EN 55032 class A filter
- 4.4" x 2.7" x 1.5"



## 80 WATT

NEW under development

## TEN 80WI

- 4:1 Input 9 to 75 VDC
- 5 to 48 VDC adjust.
- Highest power density
- Remote On/Off and Trim
- 2" x 1"



## High Power DC/DC Converters / RIA12 Surge Filters

## 40 – 300 Watt

- Excellent thermal management
- EN 55032 class A (chassis models)

- Increased EMC immunity
- Entire protective structure

- Control functions
- Wide selection of options

## 0–300 WATT

## TFI

- RIA 12, NF F01-510 Surge Filter
- Clamps overvoltage transients (up to 385 VDC) at 168 VDC
- Wide input 43 to 160 VDC
- Brownout voltage 36 VDC min.
- DIP-24 or 1.6" x 1"



## 40 WATT

## TEP 40UIR

- Railway approval
- Ultra wide 12:1 Input 9 to 160 VDC
- 5 to 53 VDC adjust.
- PCB mount
- 2.3" x 1.45" x 0.5"



## 60 WATT

## TEP 60UIR

- Railway approval
- Ultra wide 12:1 Input 9 to 160 VDC
- 5 to 53 VDC
- PCB mount
- 2.3" x 1.45" x 0.5"



## 75 WATT

TEP 75WI

- Railway approval
- 4:1 Input 9 to 160 VDC
- 5.0 to 48 VDC adjust.
- PCB / chassis / DIN-rail
- 2.4" × 2.3" × 0.5"



## 100 WATT

TEP 100

- 2:1 Input 9 to 75 VDC
- 3.3 to 48 VDC adjust.
- PCB / chassis / DIN-rail
- 2.4" × 2.3" × 0.5"



## 100 WATT

TEP 100UIR

- Railway approval
- Ultra wide 12:1 Input 9 to 160 VDC
- 5 to 53 VDC
- PCB mount
- 2.3" × 1.45" × 0.5"



## 100 WATT

TEP 100WIR

- Railway approval
- 4:1 Input 9.0 to 160 VDC
- 5.0 to 48 VDC adjust.
- PCB / chassis / DIN-rail
- 2.4" × 2.3" × 0.5"



## 100 WATT

TEQ 100WIR

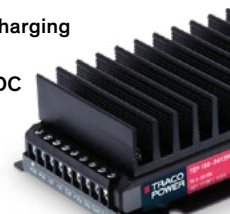
- Railway approval
- 85°C full load operation
- 4:1 Input 10.0 to 160 VDC
- 12 to 48 VDC adjust.
- UL 508 approval
- 3" × 4" × 3.5"



## 150 WATT

TEP 150WI

- CV / CC for battery charging
- Railway approval
- 4:1 Input 9 to 160 VDC
- 12 to 48 VDC adjust.
- EN 55032 class B (opt.)
- 98 × 65 × 38 mm



## 150 WATT

TEP 150UIR

NEW

- Railway approval
- Ultra wide 10:1 Input 16 to 160 VDC
- 5 to 53 VDC
- PCB mount
- 2.4" × 2.3" × 0.5"



## 160 WATT

TEP 160

- 2:1 Input 16.5 to 75 VDC
- 12 to 53 VDC adjust.
- PCB / chassis / DIN-rail
- Soft start
- 2.4" × 2.3" × 0.5"



## 160 WATT

TEP 160WIR

- Railway approval
- 4:1 Input 9.0 to 160 VDC
- 12 to 53 VDC adjust.
- PCB / chassis / DIN-rail
- 2.4" × 2.3" × 0.5"



## 160 WATT

TEQ 160WIR

- Railway approval
- 75°C full load operation
- 4:1 Input 19 to 160 VDC
- 12 to 48 VDC adjust.
- UL 508 approval
- 3" × 4" × 3.5"



## 200 WATT

TEP 200WIR

- Railway approval
- 4:1 Input 9.0 to 160 VDC
- 12 to 53 VDC adjust.
- Chassis mount / PCB
- DIN-rail mount opt.
- 2.4" × 2.3" × 0.5"



## 200 WATT

TEP 200UIR

NEW

- Railway approval
- Ultra wide 10:1 Input 16 to 160 VDC
- 5 to 53 VDC
- PCB mount
- 2.4" × 2.3" × 0.5"



## 200 WATT

TEQ 200WIR

- Railway approval
- 70°C full load operation
- 4:1 Input 19 to 160 VDC
- 12 to 48 VDC adjust.
- UL 508 approval
- 3" × 4" × 3.5"



## 300 WATT

TEQ 300WIR

- CV / CC for battery charging
- Railway approval
- 4:1 Input 18 to 160 VDC
- 12 to 48 VDC adjust.
- UL 508 approval
- Load share function
- 6" × 4" × 1.5"



## Industrial DIN-Rail Mount DC/DC Converters

## 20 – 300 Watt

- DC/DC modules designed for DIN-Rail mount

- DC/DC modules with optional mounting kit for DIN-Rail mount

## 24–60 WATT

TCL-DC

- Slim plastic casing
- UL 508 approval
- 4:1 Input 9.5 to 75 VDC
- 5.0 to 24 VDC
- EN 55032 class B filter
- 75 × 100 × 27/45 mm



## 20–60 WATT

TMDC Series

- Mounting kit for Modules
- TMDC 20
- TMDC 40
- TMDC 60



## 20–300 WATT

TEQ Series

- Mounting kit for all TEQ Series models (not on picture: TEQ 20WIR, TEQ 40WIR and TEQ 300WIR)



## Industrial High Power Converters

150 Watt – 40 kW / 45 kVA

- DC/DC & AC/DC converters up to 40 kW
- DC/AC inverters up to 45 kVA
- AC/AC static switches up to 10 kVA

- Eurocassette, 19" Plug-in Modules, wall/chassis mount or DIN-Rail mount
- IEC/EN/UL 62368-1 approvals

- Modular options and customised solutions

## 150–5000 WATT

TSC

- 19" plug-in /chassis / DIN
- 5 to 400 VDC
- Input 10 to 800 VDC or AC input
- Entire protection circuit
- Individual power solutions



## 5–40 kW

TSC 19

- 19" sub rack
- 5 to 800 VDC
- Input 40 to 800 VDC or AC input
- Entire protection circuit
- Individual power solutions



## 200 VA–45 kVA

TSD

- AC output with true sine wave
- Single and three phase
- 10 to 800 VDC input models
- AC input for frequency conversion
- Configurable for individual power solutions



## Encapsulated AC/DC Power Modules

3 – 100 Watt

- Universal input (85–264 VAC)
- EN 55032 class B filter
- ErP ready

- IEC/EN/UL 62368-1 approvals

- Start-up temperature –40°C for several series

## 3 WATT

TMPS 03

- PCB mount
- EN 60335-1 (household)
- 3.3 to 24 VDC
- 1" x 1" x 0.6"



## 4 WATT

TMLM 04

- PCB mount
- 3.3 to 24 VDC
- Single and dual
- Compact design



## 5 WATT

TMPS 05

- PCB mount
- EN 60335-1 (household)
- 3.3 to 48 VDC
- 1" x 1" x 0.6"



## 5 WATT

TMPW 5

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- PCB mount
- 3.3 to 24 VDC
- 1.45" x 1.08" x 0.7"



## 5 WATT

TMPW 5-J/-T

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- Chassis mount
- 3.3 to 24 VDC
- 2.17" x 1.08" x 0.91"



## 10 WATT

TMPS 10

- PCB mount
- Inc. EMC immunity
- EN 60335-1 (household)
- 3.3 to 48 VDC
- Ultra-compact design 1.5" x 1" x 0.6"



## 10 WATT

TMPW 10

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- PCB mount
- 5 to 24 VDC
- 1.45" x 1.08" x 0.8"



## 10 WATT

TMPW 10-J/-T

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- Chassis mount
- 5 to 24 VDC
- 2.17" x 1.08" x 0.91"



## 15 WATT

TMPW 15

NEW under development

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- PCB mount
- 5 to 48 VDC
- 1.8" x 1.1"



## 15 WATT

TMPW 15-J/-T

NEW under development

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- Chassis mount
- 5 to 48 VDC
- ??" x ??"



## 15 WATT

TMPS 15

NEW

- PCB mount
- Inc. EMC immunity
- EN 60335-1 (household)
- 3.3 to 48 VDC
- 2.06" x 1.07" x 0.93"



## 15 WATT

TPP 15-J

- Medical safety approval
- Chassis mount with JST connectors
- 3.3 to 48 VDC
- EN 60335-1
- 2.82" x 1.14" x 0.82"





**15 WATT**
  **TPP 15-D**

- Medical safety approval
- PCB mount
- 3.3 to 48 VDC
- EN 60335-1
- 1.65" × 1.14" × 0.85"

**4–24 WATT**
  **TIW**

- IP67 casing w. flying leads
- Fire safety for furniture
- EN 60335-1 (household)
- 3.3 to 24 VDC
- Mount in flush boxes

**25 WATT**
 **TMPW 25**

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- PCB mount
- 5.1 to 24 VDC
- 2.07" × 1.08" × 0.9"

**25 WATT**
 **TMPW 25-J/-T**

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- Chassis mount
- 5.1 to 24 VDC
- 3.48" × 1.08" × 0.95"

**5–30 WATT**
 **TMF**

- Medical safety approval
- PCB mount
- Fully encapsulated
- Highest power density
- 5 to 24 VDC
- Single output

**30 WATT**
  **TPP 30-J**

- Medical safety approval
- Chassis mount with JST connectors
- 3.3 to 48 VDC
- EN 60335-1
- JST connection
- 3.95" × 1.5" × 1.0"

**30 WATT**
  **TPP 30-D**

- Medical safety approval
- PCB mount, throughhole
- 3.3 to 48 VDC
- EN 60335-1
- 2.89" × 1.5" × 1.0"

**24–36 WATT**
   **TMW**

- Medical safety approval
- IP68 casing w. flying leads
- Mount in flush boxes
- Fire safety for furniture
- EN 60335-1 (household)
- 5 to 24 VDC

**40 WATT****TMPW 40****NEW** under development

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- PCB mount
- 5 to 48 VDC
- 2.52" × 1.8" × 0.9"

**40 WATT****TMPW 40-J/-T****NEW** under development

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- Chassis mount
- 5 to 48 VDC
- 3.48" × 1.84" × 1.0"

**40 WATT**
 **TPP 40E-D**
**NEW**

- Medical safety approval
- 5.0 to 48 VDC
- Protection class II
- PCB mount
- 3.2" × 2.2" × 1.2"

**40 WATT**
 **TPP 40E-J**
**NEW**

- Medical safety approval
- 5.0 to 48 VDC (adj.)
- Protection class II
- JST connection
- 4.3" × 2.2" × 1.2"

**7–50 WATT****TMG**

- PCB mount
- Compact design
- 3.3 to 48 VDC
- Safety class II prepared

**50 WATT**
 **TMPW 50**

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- PCB mount
- 12 to 24 VDC
- 2.92" × 1.85" × 0.9"

**50 WATT**
 **TMPW 50-J/-T**

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- Chassis mount
- 12 to 24 VDC
- 3.81" × 1.85" × 1"

**7–60 WATT****TMP**

- PCB mount
- Industr. EMC immunity
- 3.3 to 48 VDC
- Single, dual, triple

**15–60 WATT****TMP-C**

- Chassis mount
- Ind. EMC immunity
- 5.0 to 48 VDC
- Single, dual, triple
- UL 508 approval
- DIN-Rail clip

**20–40 WATT****TML**

- PCB/chassis
- Single, dual, triple
- 3.3 to 24 VDC
- Protection class II for TML 40

**24–60 WATT****TMM**

- PCB mount
- Fully encapsulated
- Low profile
- 5.0 to 48 VDC

**24–60 WATT****TMM-C**

- Chassis mount
- Fully encapsulated
- Low profile
- 5.0 to 48 VDC
- Single/dual output
- UL 508 approval
- DIN-Rail clip

**60 WATT****TMPW 60****NEW** under development

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- PCB mount
- 12 to 48 VDC
- 2.92" × 1.85" × 0.9"





**60 WATT****TMPW 60-J/-T****NEW** under development

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- Chassis mount
- 12 to 48 VDC
- 3.81" × 1.85" × 1"

**65 WATT****⊕ TPP 65E-D**  
**NEW**

- Medical safety approval
- 5.0 to 48 VDC
- Protection class II
- PCB mount
- 3.2" × 2.2" × 1.2"

**65 WATT****⊕ TPP 65E-J**  
**NEW**

- Medical safety approval
- 5.0 to 48 VDC (adj.)
- Protection class II
- JST connection
- 4.3" × 2.2" × 1.2"

**80 WATT****TMPW 80****NEW** under development

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- PCB mount
- 12 to 48 VDC
- 3.2" × 1.85" × 1.06"

**80 WATT****TMPW 80-J/-T****NEW** under development

- Extended input 90 to 305 VAC
- EN 60335-1 (household)
- Chassis mount
- 12 to 48 VDC
- 4.0" × 1.9" × 1.1"

**100 WATT****TML 100C**

- Chassis mount
- Active PFC
- 12 to 48 VDC
- 140 × 60 × 37 mm

**Metal Enclosure and Open Frame Power Supplies****15 – 1000 Watt**

- Excellent thermal management
- Universal input (85–264 VAC)

- EN 61000-3-2 compliant
- IEC/EN/UL 62368-1 approvals

- EN 55032 class B filter
- ErP ready

**15–200 WATT****TXM**

- Cost optimized design
- Fanless operation
- 3.3 to 48 VDC adjust.

**18–960 WATT****TXLN**

- 3.3 to 48 VDC adjust.
- Single, dual, triple
- <200 Watt fanless
- Active PFC > 0.95
- Screw terminal block

**15 WATT****⊕ TPP 15A-J**

- Medical safety approval
- Ultra compact
- 3.3 to 48 VDC
- EN 60335-1
- JST connection
- 2.6" × 1" × 0.73"

**15 WATT****⊕ TPP 15A-D**

- Medical safety approval
- Ultra compact
- 3.3 to 48 VDC
- EN 60335-1
- PCB mount
- 1.5" × 1" × 0.82"

**30 WATT****TPI 30A-J**

- Ultra compact
- Peak power up to 40 Watt
- 3.3 to 53 VDC
- JST connection
- 3.34" × 1.36" × 0.8"

**30 WATT****⊕ TPP 30A-J**

- Medical safety approval
- Ultra compact
- 3.3 to 48 VDC
- EN 60335-1
- JST connection
- 3.34" × 1.36" × 0.88"

**30 WATT****⊕ TPP 30A-D**

- Medical safety approval
- Ultra compact
- 3.3 to 48 VDC
- EN 60335-1
- PCB mount
- 2.74" × 1.36" × 0.95"

**40 WATT****⊕ TPP 40A**

- Medical safety approval
- 5.0 to 48 VDC adjust.
- Protection class I & II
- JST connection
- 3" × 2" × 1.05"

**40 WATT****⊕ TPP 40**

- Medical safety approval
- 5.0 to 24 VDC adjust.
- Single, dual, triple
- Protection class I & II
- 3.5" × 2.4" × 1.3" mm
- Opt.: DIN-rail, pin con.

**50 WATT****TPI 50A-J**  
**NEW**

- Ultra compact
- Peak power up to 70 Watt
- 5.0 to 48 VDC
- Protection class II
- JST connection
- 3" × 1.5" × 1.2"

**60 WATT****TXH 060**

- 5.0 to 48 VDC (adj.)
- 3" × 1.7"
- Screw terminals

**65 WATT****TPI 65A-J**

- Ultra compact
- Peak power up to 90 Watt
- 5.0 to 53 VDC
- Protection class I & II
- JST connection
- 3" × 2" × 1.1"



## 65 WATT

## ⊕ TPP 65A

- Medical safety approval
- 5.0 to 48 VDC (adj.)
- Protection class I & II
- JST connection
- 3" x 2" x 1.1"



## 65 WATT

## ⊕ TPP 65

- Medical safety approval
- 5.0 to 24 VDC (adj.)
- Single, dual, triple
- Protection class I & II
- 3.5" x 2.5" x 1.3"
- Opt.: DIN-rail, pin con.



## 100 WATT

## TOP 100

- 5.0 to 48 VDC (adj.)
- Protection class I & II
- Pin connection
- 4" x 2" x 1.2"



## 100 WATT

## TOP 100C

- 5.0 to 48 VDC (adj.)
- Protection class I & II
- Pin connection
- 4.5" x 2.5" x 1.5"



## 100 WATT

## TPI 100A

- 12 to 48 VDC (adj.)
- Protection class I & II
- 3" x 2" x 1.3"
- Opt.: Casing



## 100 WATT

## ⊕ TPP 100A

- Medical safety approval
- 12 to 48 VDC (adj.)
- Protection class I & II
- JST connection
- 3" x 2" x 1.3"



## 100 WATT

## ⊕ TPP 100

- Medical safety approval
- 12 to 48 VDC (adj.)
- Protection class I & II
- 3.6" x 2.4" x 1.5"
- Opt.: DIN-rail, pin con.



## 125 WATT

## TPI 125A-J

- Ultra compact
- Peak power up to 150 Watt
- 5.0 to 48 VDC
- Protection class II
- JST connection
- 3" x 2" x 1.2"



## 130 WATT

## TCI 130

NEW under development

- Unique conduction cooled design
- 12 to 48 VDC
- Protection class II
- OVC III
- JST connection
- 3" x 2.35" x 1.1"



## 150 WATT

## TPI 150A

- 12 to 48 VDC (adj.)
- Protection class II
- 4" x 2" x 1.3" (opt. casing)
- JST connection



## 150 WATT

## ⊕ TPP 150A

- Medical safety approval
- 12 to 48 VDC (adj.)
- Protection class I & II
- 4" x 2" x 1.3"



## 150 WATT

## ⊕ TPP 150

- Medical safety approval
- 12 to 48 VDC (adj.)
- Protection class I & II
- 4.6" x 2.4" x 1.9"
- Opt.: DIN-rail, pin con.



## 180 WATT

TPI 180A-M  
NEW

- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 3" x 2" x 1.3"



## 180 WATT

TPI 180-M  
NEW

- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 3.6" x 2.44" x 1.5"



## 180 WATT

⊕ TPP 180A-M  
NEW

- Medical safety approval
- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 3" x 2" x 1.3"



## 180 WATT

⊕ TPP 180-M  
NEW

- Medical safety approval
- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 3.6" x 2.44" x 1.5"



## 120-480 WATT

## TXH

- 12 to 48 VDC (adj.)
- Compact low profile
- Screw terminals



## 200 WATT

## TOP 200

- 12 to 48 VDC
- Protection class I & II
- Remote On/Off
- 5" x 3" x 1.3"



## 200 WATT

## TOP 200C

- 12 to 48 VDC
- Protection class I & II
- Remote On/Off
- 5.5" x 3.5" x 1.5"



## 240 WATT

NEW under development

## TCI 240

- Unique conduction cooled design
- 12 to 48 VDC
- Protection class II
- OVC III
- JST connection
- 4.1" x 2.46" x 1.54"



## 250 WATT

⊕ TPP 250A  
NEW

- Medical safety approval
- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 4" x 2"





**250 WATT**    **⊕ TPP 250A-FK**  
**NEW**

- Medical safety approval
- With Fan-Kit
- 12 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 4" x 2"


**300 WATT**    **TPI 300L-M**  
**NEW**

- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 4.6" x 2.44" x 1.3"


**300 WATT**    **TPI 300-M**  
**NEW**

- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 4.6" x 2.4" x 2.32"


**300 WATT**    **⊕ TPP 300A-M**  
**NEW**

- Medical safety approval
- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 4" x 2" x 1.3"


**300 WATT**    **⊕ TPP 300-M**  
**NEW**

- Medical safety approval
- Ultra compact design
- 12 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 4.6" x 2.4" x 2.32"


**450 WATT**    **⊕ TPP 450BA**

- Medical safety approval
- 12 to 53 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 5" x 3" x 1.6"
- 12 VDC auxiliary output for fan


**450 WATT**    **⊕ TPP 450**

- Medical safety approval
- 12 to 53 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 5.8" x 3.2" x 1.6"
- Fan


**500 WATT**    **TCI 500**  
**NEW under development**

- Unique conduction cooled design
- 12 to 48 VDC
- Protection class I & II
- OVC III
- JST connection
- 5.1" x 3.26" x 2"


**500 WATT**    **TCI 500-U**  
**NEW under development**

- Unique conduction cooled design
- 12 to 48 VDC
- Protection class I & II
- OVC III
- JST connection
- 5.1" x 3.26" x 1"


**600 WATT**    **⊕ TPP 600A**  
**NEW**

- Medical safety approval
- Ultra compact design
- 24 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 5" x 3" x 1.5"


**600 WATT**    **⊕ TPP 600A-FK**  
**NEW**

- Medical safety approval
- With Fan-Kit
- 24 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 5" x 3" x 2.5"


**700 WATT**    **TPI 700**  
**NEW under development**

- Compact design
- 12 to 48 VDC
- Protection class II
- JST connection
- 6.7" x 3.66" x 1.61"


**850 WATT**    **⊕ TPP 850A**  
**NEW**

- Medical safety approval
- Ultra compact design
- 24 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 6" x 4" x 1.5"


**850 WATT**    **⊕ TPP 850A-FK**  
**NEW**

- Medical safety approval
- Ultra compact design
- 24 to 48 VDC (adj.)
- Protection class I & II
- Contr. & monitor signals
- 6" x 4" x 2.5"


**1000 WATT**    **TPI 1000**  
**NEW under development**

- Compact design
- 12 to 48 VDC
- Protection class II
- OVC III
- Standby power
- Screw terminals
- 7.66" x 4.02" x 1.61"



## Outdoor Power Supply

- Rugged power supplies for harsh outdoor environments

- Connection via waterproof I/O plug connectors

- Dust, water (incl. salt water), ice and oil resistant enclosure

**120 WATT**    **TEX 120**

- IP67 and NEMA 4X rated
- 12 / 24 VDC output
- Ind. EMC immunity
- Extensive safety approval package (incl. UL 508 / ATEX IEC/EN 61010-1 and more)



## DIN-Rail Power Supplies

6 – 600 Watt

- Universal input (85–264 VAC)
- EN 55032 class B filter

- 3-Phase input for TSP 3P models

- International safety approval package including IEC/EN/UL 62368-1 and UL 508

## 15–60 WATT

## TMP-C

- Fully encapsulated
- 5.0 to 48 VDC
- Single, dual, triple
- Low profile



## 15–150 WATT

## TBL

- Low profile plastic casing
- 5.0 to 24 VDC
- NEC class II (up to 90 W)
- DC-OK signal



## 6–90 WATT

## TBLC

- Low profile plastic casing
- 5.0 to 24 VDC
- High efficiency
- ErP-ready
- UL 1310 (NEC class II)
- EN 60335-1 (household)



## 24–240 WATT

## TCL

- Slim plastic casing
- 5.0 to 48 VDC adjust.
- Screw or spring clamp connection
- DC-OK signal



## 30–120 WATT

## TPC

- Robust plastic casing
- 5.0 to 48 VDC adjust.
- ErP-ready
- DC-OK signal



## 80–480 WATT

## TIB

- Rugged metal casing
- Cost optimized design
- 12, 24, 48 VDC output
- High efficiency
- Active PFC
- Alternative side mounting



## 80–480 WATT

## TIB-EX

- UL HazLoc Class I, division 2 and ATEX certification
- Rugged metal casing
- 12, 24, 48 VDC output
- Cost optimized design
- High efficiency
- Active PFC



## 50–480 WATT

## TSPC

- Rugged metal casing
- 12 to 48 VDC adjust.
- IECEx / ATEX
- DC-OK signal



## 72–600 WATT

## TSP

- Rugged metal casing
- 12 to 48 VDC adjust.
- ATEX (opt.) approval
- Entire control signals



## 180–600 WATT

## TSP-WR

- Rugged metal casing
- 24 VDC adjust
- Wide input ranges 100/230–500 VAC
- Entire control signals



## 50–600 WATT

## TIS

- Low profile metal casing
- 12 to 72 VDC adjust
- Int. function modules



## UPS Systems and Function Modules (DIN-Rail and Industrial Cabinets)

72 – 600 Watt

- System modules for Charging, Buffering, Powersharing, Redundancy, Oring or Freewheeling

- Modules with battery interfaces providing fully integrated fail save DC power solutions (UPS)

- Solutions for further upgrading TRACO POWER power supplies or function modules

## UPS SYSTEM

## 240 WATT

## TSPC 240UPS

- Power Supply with integrated Battery management module
- 24 VDC output, tightly reg. also in power fail mode
- Use with 12 VDC battery





## BATTERY CONTROLLER MODULES

360 WATT

TSP-BCMU360

- Universal module
- For 24 & 48 VDC, tightly reg. also in power fail mode
- Use with 12 VDC battery
- No remote link to PS
- Also for redundant operation



72–600 WATT

TSP-BCM

- TSP Series access & module
- For 12, 24, 48 VDC models



240 WATT

TIB-BCMU240

NEW under development

- Universal module
- For 24 VDC, tightly reg. also in power fail mode
- Use with 24 VDC battery
- No remote link to PS
- For redundant operation



## BUFFER MODULE

600 WATT

TSP-BFM

- Universal module
- For any 24 VDC source
- 120 Ws buffer energy
- No batteries
- No remote link to PS



## REDUNDANCY MODULES

600 WATT

TSPC-DCM

- Decoupling module (no signal outputs)
- For 5–28 VDC
- 2 inputs, 25 A max.
- No remote link to PS
- Rugged metal casing



240 WATT

TPC-REM

- TPC series access modules
- Active current sharing
- For 24 or 48 VDC models
- 2 Inputs, 240 W
- DC-OK signal output
- Robust plastic casing



480 WATT

TIB-REM480

NEW under development

- Redundancy module
- For 12–54 VDC
- 2 inputs, 20 A nom.
- >99% efficiency
- No remote link to PS
- Convection cooled



480 WATT

TCL-REM

- Redundancy module
- For 5–60 VDC
- 2 × 5 A–10 A out max.
- No remote link to PS (no signal outputs)
- Slim plastic casing



360–600 WATT

TSP-REM

- TSP series access modules
- Active current sharing
- For 24 VDC, 2 inputs
- Alarm signal
- Remote On/Off
- Rugged metal casing



TRACO POWER dedicated to design and production of high quality, state-of-the-art DC/DC&AC/DC power conversion products. Our mission is to provide optimal power supply solutions for specific applications with regard to performance, quality, cost and functionality.

TRACO POWER stocks an average of USD 25+ million in available finished goods inventory for immediate shipment through our distribution partners.

TRACO POWER offers extended product life-cycles, typically 10+ years, and our products are supported by a 3 or 5 year product warranty. We understand our customers require a high quality solution as well as a diverse product offering, availability from stock, extended life-cycles and a strong commitment to quality in the form of extended warranty to support their business.

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